THE GENESEE FARMER.

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THE GENESEE FARMER.

SATURDAY, AUGUST 8, 1835.

Late Mowed Hay.

The editor of the Western Farmer has objected to our recommendation of mowing after harvest. We hope he may be enabled hereafter to make more accurate observations.

In our youthful days, it was the practice to mow the *natural grasses* as soon as might be, after they came into bloom. The hay was of a beautiful green; and all persons, as far as we knew, thought it must of course, be the best. About twenty-five years ago, our attention was first turned to the subject. Farmers in this quarter, cut their grass at such times as were most convenient; that is to say, a part was generally cut before harvest; but the principal part, owing to the pressure of other business, was cut after the grain was secured; and the same motives of convenience induced us to adopt the same practice. We found however, by repeated observations, that our live stock, whenever they had the liberty of choosing, rejected the green hay, and preferred that which had been well matured, although of a rusty appearance.

Having clearly ascertained the fact, we inquired of some of our most intelligent farmers who were also acquainted with the value of well ripened hay, what was the cause of this preference? and the purport of the answers we received, was as follows: "Grass cut before it is matured, contains little or no saccharine matter; the juices turn sour, like wine that is made of crude or watery grapes; and the sense of taste in chewing two stalks of the two kinds can distinguish them at once,—the one being much more sweet and pleasant than the other.'

The notion that plants are always nutricious in proportion to their *quantity* of soluble matter, is erroneous. The *quality* of that matter is of more consequence. Sugar is supposed to be more nutritive than any other substance; and no plant has yet been discovered that produces it in such quantities as the Sugar Cane. This is one of the *natural grasses;* and it is only cut when the plant is mature. Indian Corn is also one of the *natural grasses*, and its stalks yield much saccharine matter. In the revolutionary war when our intercourse with the West Indies was interrupted, many families were supplied with melasses obtained from this plant, but the stalk was always used when it was well ripened.

The leaves of the Cane are entirely rejected in the manufacture, as the sugar is not deposited in any part except the pith; and the last remark will apply to plants of Indian Corn. Sugar is also obtained from the pith of the Bamboo, another of the *natural grasses.* We mention these things to show by analogy that though the leaves of timothy may assume a rusty brown, the deterioration, if any, is more than compensated for, by the increase of saccharine matter in the stalks.

We are not prepared to say that the *artificial grasses* yield sugar in any notable quantities; or that the plants should be well ripened before they are cut for hay. At present we rather incline to the opinion that a distinction in this respect ought to be made between the two NATURAL ORDERS; and that the latter may *not* be improved by standing very late in the season.

Hints on Gardening for August.

Early peas which have ripened their seed, should be gathered, thrashed, cleaned, and put away for future planting. The ground thus left vacant may be sown with fall turneps, or again with peas if fall crops are desired. Seeds of all plants should be collected as they ripen; the best seed are those generally which ripen first; this is especially the case where earliness is of the first importance. In parsneps and carrots, the best seeds and those which ripen first, are those upon the center umbels; these should be cut out and kept separate. Seeds are generally preserved more perfectly in their pods or seed vessels, except where these are of a succulent or fleshy nature; but as this is seldom convenient, it will commonly be best to shell out all seeds, except those which are of rare kinds and in very small quantities. When practicable, seed-bearing plants should be suffered to stand until fully ripe, and gathered when the weather is dry. If when collected they are in the least degree moist or green, they should if possible be allowed to remain unthrashed until they are perfectly dried. In order to prevent mistakes, care should be taken to label every kind immediately with its proper name, and also to mark the year in which it grew.

Medicinal, aromatic herbs, &c. not already gathered, may be cut and dried during this month It is not an uncommon custom, but one which should be carefully avoided, to put them in bags or papers, and lay them on a shelf in the kitchen, exposed to all the fumes which arise, by which they soon loose their flavor. The best way to preserve their quality, is to pick off the leaves as soon as they are dried, pulverize them, put them through a hair sieve, and keep them in well corked bottles. Among those herbs in the best state for drying this month are Basil, Summer and Winter Savory, Sage, Tarragon, Burnet, and Bene plant.

On the Culture of Gooseberries.

We cultivate several varieties of the Gooseberry, some of which are perfectly fair, while others are covered up in mildew; and we observe no difference between the latter sorts, whether they are high on the bush, or close to the ground. It is otherwise with grapes, such as are near the ground being generally free from this malady; and therefore it is not improbable that the mildew of the gooseberry and of the grape may be different in their natures.

If we were going into a nursery to select gooseberries, we should take such varieties as are of the most vigorous growth, for such we have always found to be most free from mildew. We prefer fair fruit, though it be of inferior size. We might indeed be willing to choose some that were less thrifty than others, because we want several kinds, but we are decidedly of opinion, founded on our own experience, that a gooseberry bush of slow or feeble growth is not worth cultivating.

In a communication to the American Gardener's Magazine, by S. Walker of Roxbury, on the culture of this plant, he says, "*I prefer leaving the shoots their full length;* some persons cut them to six or eight eyes, but as *this increases the number of new shoots,*—the air, so necessary to the well doing of the plant, is prevented from circulating through the bush, and the fruit therefore becomes small and mildewed." We have not been able to perceive that this is the cause of mildew, or that the mildew is increased under such circumstances. We approve however, of his plan of pruning.

Summer Flowers.

In a letter of the 25th ultimo.

Spiræa spicata was fully in bloom on the 10th instant, though one stem was out three or four days earlier. The specific name however, like others which some learned botanists give, is not appropriate,—the inflorescence not being in spikes but in panicles. These are terminal; and some of the stems of the present year's growth, rising nearly from the ground, are three feet in length. In its white flowers, it has more resemblance to *S. aruncus*, than any other species of the genus which I cultivate. It is a desirable shrub.

Verbena aubletia is now in blossom from seeds which were sown this spring in the hot-bed, where it remains. The rosy color of it flowers have a freshness which is pleasing.

Ammobium alatum also blooms in the hot-bed. It was brought about thirteen years ago from New Holland into England, where it is considered a hardy perennial. It is a very curious plant. The leaves are decurrent in a remarkable degree. These are strap-shaped; and the middle part of each is attached lengthwise to the stalk, so that both edges project like wings. I have never seen any other plant that had this garniture in such perfection. It belongs to the Linnæan class Syngenesia. The scales or leaves of the involucrum are of a brilliant white, in the center of which stand the florets of a golden yellow. It is very ornamental.

Centaurea aurea is a fine species. The flowers are of a golden yellow, two inches in diameter, terminating the stalk which is two feet high. It is a hardy perennial.

Silene ægyptiaca is an annual with delicate pink colored blossoms. It is very pretty; but I have found the seeds to be difficult to germinate.

LARGE CUCUMBER.—We have lately seen a very fine cucumber, cut from the garden of Wm. Pratt, Esq., Oakley Place, which measured upwards of twenty inches in length. The kind was called Walker's Green; the seed was procured in England by Wm. Pratt, jr.—*Boston Pat.*

Early Plums.

There was brought to this market 6 bushels of ripe plums on the 5th instant, by a farmer of Henrietta, in this county, and we regret that we are unable to give his name. They were of the pale green variety, and are called Gages, but erroneously. The flavor was good, and they are worthy of notice as a very early kind. In ordinary seasons they would have been at maturity the last of July, which is earlier than any species we know of, except the Cherry Plum.

Peaches.

E. B. Strong, Esq. of this city, has had the Scarlet Nutmeg Peach fully ripe for several days. Also, Early Harvest Juneating and Bow Apples.

We comply with the request of "A Subscriber" to insert the following from the New York Farmer, inasmuch as the article to which it is a reply has heretofore been published in this paper.

Saxony Sheep.

Mr. S. Blydenburgh: Sir—I wish to present through you, to the New-York Farmer, and through it to the public, a few remarks in reply to a communication in the last May number of the Cultivator, with the signature of R., against which, as I consider it calculated to do me serious injury, I hope you will not deny me the privilege to appear and defend myself.

It is certainly laudable in any person to wish to acquire a good reputation; but it is not laudable when that wish is so strong as to cause him to use uafair means to him to obtain it. There is room enough in the world for every honest man's reputation, without pulling down that of others to build his upon the ruins.

That Mr. R. is a respectable sheep breeder, and is entitled to the full credit of having introduced into the country a valuable breed of sheep, I have no disposition to dispute; I should rejoice in his success, and would not withhold from the public any part of the little share which I can give of the praise which is his due. But I should think Mr. R. ought to have reflected that other people may value their reputation as highly as he does his.

To a man who has adopted the business of sheep breeding as his main concern in life, and has had the ambition and the enterprise to procure a choice breed from a foreign country at great expense, the reputation of the breed so introduced becomes in a measure amalgamated and inseparably connected with his own. If it possesses the supposed merits, to traduce its character in the public estimation is not only to deprive the public of its benefits, but to circumvent the introducer, and mollify his honest hopes of the remuneration to which he is entitled.

There are several distinct points of excellence in which the value of sheep consists, each of which is of high consideration. No one breed of sheep possess them all, but thousands of flocks are destitute of any of them. The most important qualification to the manufacturer is to produce the finest wool, as that quality affords him the greatest profit, and gives him the highest reputation. A qualification of equal value to the ordinary farmer, and perhaps to the mass of mankind, is to shear a great fleece, though of middling quality. A third point, which is is of the highest importance to the butcher and the epicure, and not unimportant to the farmer, is the quantity and the quality of the carcass. A fourth point, which is of general importance to all, is hardiness of constitution. Now, since no one sheep ever possessed in any thing like the highest degree all these important points, it is very natural for one man to attach the greatest importance to one point, and another to another point. The man who feels a pride in wearing the very finest cloth, and who has the wealth to gratify it, will probably feel a corresponding gratification in owning the sheep which produces the wool to make such cloth, especially if it affords him a profit equal to, or greater than, that from other breeds. Another man's pride will be enlisted altogether in favor of sheep of enormous size, especially if it shears a fleece in proportion. No matter if it is coarse; there are more people, he will say, to wear coarse cloth than fine. In the mean time, the man who measures his enjoyments in life by the quantity of good eating, says, give me the sheep that yields the meat, and you may take the wool, fine or coarse. But the man who is rather sparing of his labor, and wishes to feed a great flock with as little trouble and expense as possible, who likes to insure a flock to live like the Irishman's horse, without eating, and to scorn a shelter in the severest snow storms, such a man would seek a breed, if he could find it, which would thrive and improve under such treatment. I am perfectly willing that each of these men should enjoy the benefit of his choice of these breeds of sheep, or even of all of them, and I only ask in return to enjoy the same privilege.

I am perfectly willing to concede to Mr. R. all the absolute properties that he claims respecting his South Down sheep, or any other sheep he may possess. If they are capable of sustaining the cold of the polar regions, or the heat of the torrid zone, or can live on air, like the camelion, I should certainly feel rejoiced in his good fortune. I have no desire to enhance the character of my sheep by depreciating that of his.

Mr. R. begins his remarks, after answering the five queries, which, by the by, he answers very much to suit his own purpose, by generously conceding a point, which I think he dare not deny, that the "Saxon sheep undoubtedly produce the finest wool." For that concession I thank him. "But," he continues, 'their fleece is light, seldom exceeding in weight 2½ lbs., and is too open to resist our storms. They are feeble in constitution, require great care, are poor nurses, and their lambs are raised with difficulty. The mutton from such sheep must necessarily be of a miserable description!" He further states, "that he believes in Connecticut even the pure Saxony sheep may now be purchased at a comparative low price, say from six dollars to four dollars a head, and perhaps lower still," and he remarks in another place, "I desire to be understood as speaking of all the pure breeds, and not of grade sheep." Again he says, that "the farmers are now aware of their error in using the Saxon cross, which has ruined the constitution of their flocks, and decreased their clip of wool nearly one half, and reduced their produce until, with ordinary management, more than twenty-five lambs are seldom raised from a hundred ewes."

In answer to all this, I would in the first place remark, that there are nearly all sorts of sheep in Germany, and even in Saxony, very poor, as well as perhaps the best in the world. Sheep have been imported from there for speculation, by persons who neither knew nor cared about their qualifications. It was enough that they were Saxon sheep; and probably sheep have been sold as such which never saw Saxony. In the first place, I think Mr. R. must have received wrong information about the twenty-five lambs to a hundred ewes, and the other dreadful sheep-killing stories he tells against the *pure breed* of Saxony sheep, for I have been much among sheep breeders in this country, and I never heard of any such case before. In the next place, I am confident Mr. R. must have been deceived as to the identity of the *pure* Saxon breed, or, at least, we differ in opinion respecting that breed. That he may have been misinformed or deceived in both these cases, I think is evident, from the fact of his having gone so headlong as materially to injure a flock of nearly 2000 grade merinoes by "one single cross of Saxony." A cautious man would not have experimented upon a scale so unnecessarily large. If he means some speculative breed of Saxon sheep, he ought, I think, to have said so, and not by his statements injure the reputation of my breed, which I think I shall show he knows nothing about.

But as I wish to put the most charitable construction upon every man's conduct, and to be on friendly terms with every one, especially a brother wool-grower, and as he, brother R., has been so kind as to concede to the Saxon sheep (though perhaps he did not my sheep) the only point of absolute superiority I ask for them, I will concede to him, if he wishes, that the South Downs, that is, Mr. R.'s *improved pure breed* of South Downs, excel all other breeds of sheep in every good qualification, except the one he has had the goodness to relinquish to the poor Saxons—that they are perfectly capable of enduring all weathers from the equator to the poles—that they will eat and thrive on any thing vegetable, fossil, or mineral, or go without eating. I will also, for the sake of a good understanding with Mr. (I mean brother) R., not only admit that he did not mean to do me any injury, but I will prove that he had no allusion to my flock, and was altogether unacquainted with it, both which will evidently appear from the following substantial *facts*.

There is in Saxony a breed of sheep which were introduced and reared with great care by Augustus, Elector of Saxony and King of Poland, which, in commemoration of the introducer, have been called Electoral breed. I was brought up in that country to rural husbandry, particularly to the care and management of sheep, and perfectly acquainted with the purest and most celebrated flocks. From these I selected my sheep, and brought them to this country. They bore the fatigues of the voyage remarkably well, and arrived in safety. I sustained some little losses at first, from being a stranger to the peculiarities of the country, from having to hire my sheep kept, for want of suitable accommodations, and of such fodder as I wished. During the last eight years, and since I had a farm of my own, I have not lost over 1½ per cent.: for the last year not more than 1 per cent. The last two winters I had no loss, and the last year I raised 101 lambs from 100 ewes, one only of my ewes having twins. The sheep which R. speaks of do not shear more than 2¼ lbs. My flock, last year, of 200 ewes and lambs, averaged 2 lbs. 6½ ounces. If I had had a proportion of wethers, they would probably have averaged 3 lbs. My grown bucks sheared 4½ lbs. He says they (that is, the sheep he speaks of,) are poor nurses; my ewes are uncommonly good. All these facts can be abundantly proved from my sheep records, in which births and deaths, and every thing of importance, is recorded, and from credible witnesses. All these facts, in which there is no guessing, show conclusively that R.'s statements about the *pure breeds* of Saxon sheep did not allude to my sheep at all; and therefore I hope there will be no unkind feelings between us.

Respecting the "*miserable*" quality of the meat, if R. will procure the best sample of South Down mutton he can find, I will meet him at any place he shall name with a sample of my Saxons; both shall be cooked in the same manner; he shall select one or more of the most accomplished connoisseurs in good eating, and I will rest that point on their decision.

I have but one little statement more to add, and I will then leave the subject to the public. The prices current of wool in New York, given in the Cultivator for the last month (May) are for Saxony, 80 cents; for half blood, 53 cents, and for native, 33 cents. Now allow my ewes to produce 2¾ lbs., (and they will rather overgo than fall short of it,) then at 80 cents the fleece will bring $2,40. Allow the South Down ewes to shear 4 lbs. and allow it to be equal to the half blood merino, and the amount will be $2,12. Allow the Bakewell breed to produce 7 lbs., which is 1 lb. more than R. rates them; this at 33 cents will be $2,31. The three fleeces will stand thus:

Saxon,	$2,40
South Downs,	2,12
Bakewell,	2,31

With these remarks I submit the subject.

Henry D. Grove.

Buskirk's Bridge, June 2, 1835.

From the Tennessee Farmer.

Saving Clover Seed.

The two great objects to be attended to, in raising clover seed with profit, are—First, to secure the production of as large a crop to the acre as practicable—and Secondly, to harvest the crop in such a manner as to bring as large a portion of the seed into the barn and to leave as small a portion of it as possible in the field.

To attain the first object, that of securing a large product, we have in our preceding numbers, in observations on the culture of clover, given the necessary directions; we will now only repeat, that the main things to be attended to are the following—1st. That the land be fertile. 2d. That it be well prepared before sowing the seed, as heretofore directed. 3d. That a sufficient quantity of seed be sown to the acre. 4th. That it be evenly distributed over the ground. 5th. That, whenever the land requires its aid, gypsum or plaster be sown on the clover—and 6th. That it be not injured by injudicious or excessive grazing. If these particulars be well attended to, an acre of ordinary land will produce three bushels of seed in a common season, and often more.

We come now to speak of the more difficult and laborious operation of safely and economically harvesting and securing it. This requires care and attention. The great objects to be aimed at are, to cut the seed at the period when there is the largest portion of ripe seed on the ground, in that stage of maturity which will admit of its being collected into the barn, and so to handle it as to prevent the seed from being shattered off and left on the field, while the straw or haulm only is collected in the barn. It is, we believe, to the improvident and ruinous neglect of strict attention to these two latter objects, that most farmers may attribute their failure in making clover seed. We will lay before our readers the results of our own observation and experience on these important points, hoping that those of our patrons who may have discovered a better mode of effecting these objects than the one recommended, will yet communicate to us their practice in time to enable us to lay it before the public in our next number.

Time of Cutting.—As the clover seed, from the time the first heads ripen to the close of the season, are daily arriving at maturity, the great desideratum is, to ascertain the precise period when there is on the ground the greastest portion of ripe seed in a state which will admit of its being collected and brought into the barn. If the clover be cut before this period, there must evidently be a loss sustained, from the immaturity of so large a portion of the seed. If the cutting be deferred beyond this period, an equal, and perhaps a greater loss will be sustained, from the impossibility of saving the seed first ripened, generally the best, on account of its being so easily shattered off. We would recommend, as the most eligible time for cutting, the period when about two-thirds of the heads have become ripe and assumed a black color; many of the others, at this time of a brown color, will ripen after cutting.

Mode of Cutting.—Where the clover has not lodged, and is high enough to admit of it, by far the most expeditious, and in every point of view the most eligible mode of cutting, is to cradle it as we do grain, only throwing it into double swarths, that is, laying the clover cut from two lands into one swarth. If the grass be so short as to require it, a strip of linen may be fastened on the fingers of the cradle, so as to prevent the heads falling through them.

Mode of Curing.—If the crop be not heavy and the weather be good, the swarths may lie undisturbed for several days, until the hay be perfectly cured; it should then, in the morning or evening, while sufficiently moist from the dew, to prevent its shattering off too easily, be gently raked into small bunches, such as can be conveniently raised with a fork, and laid on the wagon. When not too damp, these bunches should be hauled to the barn, and either stowed away in mows, or which is best, threshed off, and either immediately cleaned, or else the heads stowed away in a room prepared for the purpose until winter, to be then threshed or trodden out. But should there be rain on them, or should they be suffered to remain in the field any considerable length of time after being raked up, these bunches must with a fork be gently turned bottom upwards, and laid in a new place, after every rain to which they may be exposed, and after every two or three days they may have lain in the field in fair weather. This is necessary to prevent the seed from being injured by the heat and moisture to which they will have been exposed, from the sun and rain, and the moisture of the earth. After being sufficiently cured, while dry, let the seed be gently laid on the wagon or sled, and hauled to the barn, using every necessary precaution to ensure, that as little of it as possible be left in the field, or scattered along the road.

Mode of Cleaning.—Various methods are practiced for cleaning the seed from the chaff. The only two, as far as we know, used in this country, are treading it out with horses, or cleaning it with a threshing machine. The first is tedious, laborious, filthy and unwholesome, both to man and beast: the latter is far preferable in every respect, but as all are not provided with threshing machines, and as therefore many must still continue to tread out their seed, we will submit a few observations on the mode of performing this observation. Having covered the barn floor with seed in the chaff to the depth of from 12 to 18 inches, put on the horses and tread one day; the next morning run the chaff through a fan, much of it will have been beaten to dust and will be blown away, as will also the light chaff having no seed, and that from which the seed has been separated, but much the larger portion of the seed, still enveloped in the chaff, will be found in the rear of the fan; this, having been separated from the empty chaff adjoining it, must be again spread on the floor, and having added another portion of untrodden chaff, the horses must be again put on and made to tread it another day, when it should be again run through the fan as before; the produce of this will far exceed the first day's treading, but still much good seed will be found immediately in the rear of the fan not yet separated from the chaff—this must again be spread on the floor, and a new addition made of untrodden chaff, and this process must be repeated until the whole crop is trodden out. The seed, after passing through the fan, should first be run through a sieve sufficiently coarse to permit the clover seed to pass through, but retaining all larger seeds and trash. It should then be again run through a finer sieve, retaining the clover seed, but permitting the passage through of all smaller substances; by these two processes, the clover seed will be thoroughly cleansed from all kinds of filth and prepared for market. The only advantage derived from cleaning the seed rather than sowing it in the chaff, are the ascertaining with greater certainty the quantity sown, and the insuring a more equal distribution of the seed—where, therefore, a sufficient quantity can be afforded to insure the desired thickness in every part of the ground, sowing in the chaff will not only do as well, but is to be preferred, as it is believed more likely to come up and to stand.

In reply to our correspondent's 3d query, as to the time of ploughing under clover for wheat—we would recommend that it be done as soon as a considerable portion of the seed has become ripe—the wheat should then be sown and well harrowed in, but the land should by no means be again ploughed, until the wheat has been taken off.

As to briars and sedge grass, we refer our subscribers to what we have said in former numbers, and in the present; the sedge grass he will find easily subdued, if the ground be ploughed and harrowed in the winter; pasturing and deep ploughing are the only effectual modes we have tried for extirpating briars and sprouts; we have much confidence however in the efficacy of the mode described in the receipt published in this number.

Harmon's threshing machine will thresh out, if properly attended to, from five to ten bushels of clover seed, and from 150 to 200 bushels of wheat per day. This machine will cost about fifty dollars, exclusive of the house and mill-wright's work. This is the only machine for cleaning clover seed in this part of the country, of which we are apprized; we have used it for two years past with great advantage, especially in cleaning clover seed.

From the Farmer and Gardener.

On the Use of Lime.

A writer in the *Maine Farmer* states, that if long manure be appled in considerable quantity to land where wheat is sown, that it has a tendency to make it grow too rapidly, and to force the sap out, so as to impoverish and shrivel the kernel. He therefore thinks that the proper manure is either lime or a crop of clover ploughed in. By the use of lime in England, he asserts that the wheat crop has been increased in quantity within fifteen years from 30 to 40 per cent.

With regard to the effect of an over quantity of animal or long manure, deteriorating the quality, and subtracting from the amount of grain, all experience confirms the facts stated; and we do not in the least question the efficacy of either a clover lay, or of lime, upon the yield of the golden crop; nor do we doubt the per centum of increase assumed to have been arrived at in England; for we hold it that almost any soil, to which this fructifying mineral is suited, and there are but few that it is not, which may be in an exhausted state, that may not, by a proper course of tillage, and a free use of it, be made to average an increase even greater than that named: we think we would be safe in affirming that, under a favorable concurrence of circumstances, it would even reach a hundred per centum. And while on this subject, we may as well annex the following communication, which we copy from the *Poughkeepsie Telegraph.* It is from the pen of a New York farmer, and coming as it does from a practical man, is entitled to the more credit:

Messrs. Editors—In my daily labors I have often been thinking, whether ways and means could not be devised to improve our farms, and consequently diminish the labor and increase the profits. When I recall to my mind the mode of cultivation which has been pursued ten or fifteen years since, I find that much has already been done in the improvement of our land; but hitherto our improvements have advanced but slowly. The intelligent and enterprising farmer does now begin to see that all the money which he spends to enrich his fields, is not thrown away, but brings him, in a year or two, fifty per centum profit.

Clover and Plaster is undoubtedly a very cheap manure; and if these useful articles had not been introduced among us, our farms would at present be of very little worth. However, it is my opinion that our lands can still be improved, so that the acre will at least yield one third more. And I think the application of *Lime* is the only means through which we can accomplish this desirable end. I perceive in East Pennsylvania, where the land for a length of time has been cultivated, much lime is used to very great advantage. I was induced to make the experiment on a small scale, and I am happy to say that my expectations have been fully realized. Twenty-five bushels I sowed on an acre. I harrowed it in with my wheat, but I could perceive very little difference in consequence of its application. However, the following year I perceived that the clover, which I sowed with the wheat, had a better color, was larger, and endured the drouth much better, than where the lime had not been applied. Last spring I ploughed up the sod and planted corn in it; and after it was half grown, I could, even from a distance, see where lime has been used. The stocks and leaves were larger, and of a very dark green color, and in the fall I realized at least one third more from that little spot of ground, than I would have done, if no lime had been applied. W. J. E.

[Fifty or a hundred bushels to the acre may be used with the happiest effects—the former quantity on sandy or gravelly loam, the latter on cold tenacious clayey soils.—*Ed. F. & G.*]

COMMUNICATIONS.

Budding the Grape Vine.

BY W. W. B.

My unsuccessful attempts hitherto in grafting the grape, have suggested this summer the experiment of budding it. Several vines, both native and exotic, have been budded within a few weeks past. The buds appear fresh and green, have united to the stock, and without doubt will grow. The wild frost grape makes an excellent stock. I am much pleased with the experiment, and would recommend it to my brother horticulturists. It possesses all the advantages of grafting, with the additional one of being much *easier*, and probably *surer*. W. W. B.

Hammondsport, July 30, 1835.

To Cure Hams.

BY P.

In a late number of the Genesee Farmer an inquiry was made as to the mode of curing Virginia Bacon.

It has been thought that the superiority of Virginia hams is owing to the free use made of corn in fattening the hogs, and to their being permitted to run at large until nearly the time of slaughtering them. Under this treatment, not perhaps the most economical, the animal fiber acquires a firmness and solidity which is an important object in making good bacon. Another desirable object is, that the pigs be not too large, from 150 to 200 pounds being a very good weight.

Supposing then that these requisites exist, and that the pigs have been fed on new corn for four or five weeks previous to butchering, the following directions will probably be found sufficint to insure bacon of excellent quality. On every joint spread a teaspoonful of pulverized saltpeter, and rub well with fine salt; then put a plentiful supply of salt on the fleshy side, and lay the pieces away compactly on a platform or in any other convenient place. After the pork has lain in this situation for four or five or six weeks, according to the temperature of the weather—the colder the longer—the mass should be broken up, cleansed of the salt by scraping, and securely hung in the meat house to be smoked. The smoking must be continued until the outside of the hams becomes dark and sooty. The common practice in Virginia is to kindle a fire every morning for two or three months, and sometimes longer, which may readily be kept burning in a half smothered state during the greater part of the day. The bacon merchants keep their fires up night and day for eight or ten days; but their hams are much inferior to those made in private families, where the process is more gradual, and the heat inconsiderable.

In order to secure the bacon from the skipper fly during the summer, it should be taken down in the spring and packed away in hogsheads with unleached ashes, using the necessary precaution to place a few corn cobs between the pieces to prevent their coming in contact with each other. The ashes will also have the effect of greatly improving the flavor of the bacon.

Under this simple management, I have no doubt as good hams may be made in New York as in Virginia. In addition I would respectfully suggest, that in order to have the favorite Virginia dish in perfection, the cook should be directed to boil the ham and cabbage *in the same vessel*, and serve them up together, so that the latter may be fully seasoned by the essence of the former. If the cabbage be boiled until it is *done*, it will be esteemed more highly than I should imagine it to be in *some places*, where, if it had been found accidentally in the chamber of an invalid instead of on the dining table, it would have been thought to answer admirably well for dressing a blister. P.

Goochland co. Virginia, 7 mo. 27, 1835.

New & Singular Species of Grain.

BY W. W. B.

This grain, now growing in the garden of the writer, is something of a curiosity. The kernel resembles rye in shape, but is much larger and of lighter color, with a very thin skin. In hardiness and in taste it resembles rice. Its long loose bearded heads give it a singular appearance. It was given to the writer by John Magee, Esq., of Bath, former member of Congress from this District, who obtained it of a friend at Washington several years since. The most we have been able to learn of its history is, that it is a foreign grain, and was supposed to be a species of rye from some of the South American republics. Its botanical characters, however, show it to be a species of wheat, (Triticum.)

Generic characters.—Flowers spiked, spikelets serrile upon the teeth of the rachis, six flowered, the two upper florets abortive. Calix glume two valved, opposite, boat shaped, mucronate—inferior valve of the coral terminating in a bristle—superior valve sub-conduplicate

Specific characters.—Spikes loose, 5 to 10 inches in length—joints of the rachis one-fourth to three-fourths of an inch apart—glumes, spreading conduplicate on one side, an inch to an inch and a half long—inferior valve of the lower plants same length of the glumes—bristle 4 to 6 inches long—culm almost solid, with large joints—leaves much larger than those of the common wheat—grows 3 to 4 feet high.

We should be happy if any of our botanical friends could give us the name of this species. It appears to be a winter grain, though that which we have growing was sowed this spring. It is a beautiful grain, apparently productive, valuable we should think for malting, feeding, and to use as a substitute for rice in culinary preparations. Whether it be adapted to our climate, and a profitable grain to raise, remains to be tested by further experiment. W. W B.

Hammondsport, July 31, 1835.

Chess.

BY S.

Much has been said and written respecting the transmutation of wheat to chess, and the controversy seems not yet to be settled. The doctrine of transmutation has been substantiated probably by injudicious experiments—on the contrary it has been proved to be erroneous by fair and accurate experiments. I am not, however, inclined to decide unfavorably of either, until I am convinced by my own personal experience, which, as soon as time will permit, I shall test to my satisfaction.

With this little preliminary, I shall proceed to state some facts which have occurred in my practice, not proving or disproving the doctrine of transmutation. In the fall of 1832, I sowed two pieces of wheat, one about five acres, the other about one acre. The seed was all of one kind, having a little sprinkling of chess in it. At harvest time there was a remarkable difference, the latter piece being about one fourth chess, while in the other not a fifth part as much. This difference might be attributed to a difference of soil. The one where the chess grew most was a sandy loam, with a mixture of argillaceous earth; the other a heavy black loam, with a clayey subsoil. The two pieces were sown about the middle of September.

Again: In the fall of 1833, I sowed two pieces of about five acres each, one being sowed the 10th of September, the other the 20th of October; the latter piece was sown so late that a part of it did not come up until spring. At harvest time there was not a kernel of chess scarcely to be seen in it, while in the other there was as much as naturally would grow from the seed that was sown, it all being the same kind, and some considerable chess in it. This could not arise from a difference of soil, because the pieces joined each other, and consequently the soil must be nearly alike.

I am aware, however, that various conjectures and theories might be raised from the above mentioned circumstances to support either side of the contested point. Some have gone so far as to say that chess will not grow—that when put into the ground, it will have no effect on its germinating powers. This I conceive to be a mistaken idea, although it would seem so to some from one of the above circumstances, yet I think this may be easily accounted for. It being sown so late, it would not be improbable to suppose that the icy chains of winter were too much for the young and tender plants to endure. The wheat was winter killed some, and why is it not reasonable to suppose that the chess did also?

I think, however, that chess may be eradicated in a great measure, if not totally, by judiciously clearing the seed from it every year, until it be wholly exterminated. In vol 4, No. 50, of Genesee Farmer, is a very easy way recommended to clear seed wheat from this spurious plant. If this method was more universally practiced, there would be a disappearance of chess in a short time, and we find that chess usually prevails among the advocates of transmutation. In all my observation and experience, I have never been able to see wheat and chess both growing from the same kernel, as some have attested, nor do I think it possible that such a thing can be produced. I hope experiments may be multiplied in regard to this subject, and the great controverted point settled. I promise this for myself, and when I am convinced by experience or otherwise, I shall probably trouble you with another (which may serve as an apology for this) communication, with my manner of procedure. S.

Brutus, June 4, 1835.

The amount paid into the treasury of Pennsylvania for canal tolls from Nov. 1834, to July 14, 1835, was $361,429,88—$200,000 more than was received during the corresponding season of last year.

From the Library of Agricultural and Horticultural Knowledge.

The Dairy.

PROCESS OF CHEESE MAKING.

(Concluded from page 242.)

2. *Wiltshire Cheese.*—It would appear that shape and size constitute the only difference between Gloucester and North Wiltshire cheese. The following process, by Mr. Nichol, Easter House, Lanarkshire, obtained the premium of the Highland Society of Scotland, and is well worthy the attention of the reader:

"We collect two meals to one making; the evening's collection is run through a fine searce in the milk vessels, and kept over night; the cream is taken off in the morning, and the milk heated to the degree proper for warming the whole mass, which, with the cream and new milk, is run through the searce into the milk-sye, (placed on a form,) and the proper quantity of coloring* rennet added, (about a table spoonful of the latter to fifty Scotch pints, when good, is sufficient.) The mass is then stirred about and well mixed, after which it is covered up, and let stand till coagulated. The dairy-maid introduces her hand into the mass, and stirs it about slowly, till it is all broken, pretty small. After standing about fifteen minutes, the edge of the tub is lifted up, and the whey run off slowly over the lip into a vessel placed below. The tub is then let down to stand a little, after which it is turned one-fourth round, and another collection emptied off. Thus, by turning the vessel a fourth round every time it is let down on the form, the curd is placed in a different position, in order to make it part with the whey more quickly.

"The process is continued till the curd has got a pretty firm consistence; it is then cut a little with a table knife, and what little whey it then parts with emptied off, and the curd lifted into the drainer.

"This method, I find, makes the whey come off quickly, and more pure than any other mode I have seen practiced. We never touch it with the hand to press out the whey, as I find the least violence is apt to make it come off white, and so weaken the quality of the cheese.

"Being now in the drainer, (a square vessel with small holes in the bottom, with a lid to go within it,) the lid is put on it, and a cloth thrown over it, after which it is allowed to stand twenty minutes. A fourth hundred weight is then laid on, to lie twenty minutes more. It is then cut into pieces of two inches square with a table knife, the lid put on, and one half hundred weight laid on it, to lie half an hour. This process of cutting it smaller every half hour, and adding more weight till there be a hundred weight of pressure on it, is continued for four hours after the first cutting in the drainer, when it will be ready for the chessil, (cheese mold.)

"It is then put into a vessel kept for the purpose, with the proper quantity of good salt, and cut with the curd knife very small. A clean cheese cloth, rinsed through warm water and wrung out, is then laid on the chessil, and the curd put into it, and a half hundred weight laid on it for an hour. It is then put into the press, (constructed so as to hold four chessils, and the pressure augmented at pleasure,) with a pressure of two hundred weight, where it stands three half hours. It is then taken out, and another cloth wrung through warm water, laid on the chessil, and the cheese turned upside down into it, and introduced into the press, with a little more weight applied, to stand all night. Next morning and ever after, it is changed four times a day, with clean dry cloths, till it is properly pressed, (which will take at least three days,) the weight being always augmented till the pressure be at least a ton weight. A fine round cloth, the size of the chessil bottom, is laid in it, and the cheese put into it, and set into the press for an hour and a half, in order to give it the proper shape.

* The coloring to be rubbed in a bowl, with a little warm water, and allowed to stand a little, and then poured off, as even the best is found to contain sand and sediment.

"After the cheese is taken from the press, it is rubbed with salt, and turned every day for a week or ten days; after which it is rubbed with a dry cloth and turned daily for a month longer, in order to keep it from molding; after which every other day will be sufficient. The cheese-room ought be in rather a cool exposure, and I find it sometimes necessary to cover the new cheeses with a cloth, in order to keep them from cracking.

"As I am anxious to give every information in my power, I have taken a note of the temperature at each making, immediately after mixing the rennet into it, from the 16th of July to the end of August, and have sent the degree of heat at which each cheese in the sample sent for competition was made."

Date of making. 1825.	*Number.*	*Description.*	*Heat of milk immediately after mixing in the rennet at 10 o'clock A. M.* Degrees.	*Temperature of the room at 2 o'clock P. M.* Degrees.
July 16	1	Imitation Wiltshire	95	74
"	1	Gloucester	95	74
18	2	"	95	65½
20	2	Wiltshire	91½	70
20	4	" Gloucester	91½	70
Aug. 6	10	Imitation Wiltshire, all new milk.	94 Saturday Evening 8 o'clock.	
8	8	Imitation Wiltshire	92	70
22	4	" Gloucester	92	70
22	5	" Wiltshire	93	66
25	5	" Gloucester	93	66
25	7	" Wiltshire	92	67
26	6	" Gloucester	97	67
8	8	Wiltshire	87 Made at 8 o'clock Evening.	60
8	11	" Wiltshire	94½	

According to Mr. Sanderson, the pine shaped cheeses made in imitation of North Wiltshire, are put into a cloth, made in the shape of a filtering bag, when the curd is quite green, and hung with the point down for twenty four hours. They are then put into a net with a cloth over it, and again suspended the reverse way.

3. *Chedder Cheese*—Derives its name from a vale in Somersetshire, where it is exclusively made. The cheese is of a spongy appearance, and the eyes are filled with a limped rich oil; they usually weigh about thirty pounds each.

4. *Cheshire Cheese*—Is made from the whole of the milk and cream; the morning's milk being mixed with that of the preceding evening, previously warmed. The usual weight is about sixty pounds each

5. *Sage Cheese*—Is made by steeping one night, in a proper quantity of milk, two parts of sage, one part of marigold leaves, and a little parsley, after they have been bruised. On the following morning the *greened* milk is strained off, and mixed with about one third of the whole quantity intended to be run or coagulated. The green and white milks are run separately, the two curds being kept apart until they be ready for vatting; these may be mixed either evenly and intimately, or irregularly and fancifully, according to the pleasure of the manufacturer. The management is the same as for common cheese. Green cheese are made in the vale of Gloucester, as also in Wiltshire.

6. *Stilton*—May be made by the following simple process:—To the new milk of the cheese-making morning add the cream from that of the preceding evening, together with the rennet, watching the full separation of the curd, which must be removed from the whey without breaking, and placed into a sieve, until of such consistence as to bear being lifted up and placed in a hoop that will receive it without much pressure. The cheese, as it dries, will shrink up, and must, therefore, be placed from time to time in a tighter hoop, and turned daily, until it acquires the proper degree of consistence for use or keeping.

Beet Root Sugar.

The following remarks on the cultivation of the beet, and manufacture of sugar from it, are from the Barbadoes Mercury. They will be found extremely interesting:

The cultivation of beet root in France, which only a few years back was considered as almost insignificant, has, it seems, very lately risen into something like importance. If we are rightly informed by the contents of a letter in an English paper, nearly 300 manufactories of the kind already exist in two departments only. Supposing, says the writer, the average produce of each to be 100,000 pounds of sugar, the result would be three millions of pounds annually raised in these districts! The principal cause assigned for this active extension of the cultivation of the beet root sugar, is the advantage agriculture derives from it, by enabling the cultivators of it to dispense with fallows, the custom being prevalent in that country, of allowing lands to remain untilled one year in three. After the sugar has been extracted, there remains so nutritious a pulp, that in two months, without the employment of any other food, a great number of cattle may be fattened upon it. A manufactory of ordinary size, it is computed, affords a sufficient quantity to feed 100 bullocks, and from four to five hundred sheep for six months. This is considered a great source of profit, as the manure these cattle produce, permits the cultivators, in addition, to till their land regularly on the third year, instead of leaving it fallow, which is reckoned equal to an addition of one half to the extent of their land. A late discovery, said to have been made by M. Brame Chevalier, a celebrated refiner of Lille, appears to have still further augmented the favorable prospects arising from the manufacture of beet root sugar, which is made to yield 10 instead of 5 per cent., as formerly. The French colonial planters, it appears, from the concluding portion of this article, have become seriously alarmed at the extensive production of this kind of sugar by the parent government; and we should suppose very justly so, as it is quite evident, that if it really, under all circumstances, proves so generally beneficial to the agricultural prospects of the country, the encouragement now given to the manufacturing of the article will daily increase, and consequently the colonial sugar become of infinitely less value than it is at present. Looking to ourselves, we do not see why beet root should not be cultivated in the colonies as well. It would be at least worth the trouble of some experimentalist to try it, as if it served for no other purpose than as an article of good and nutricious food to the cattle, which we often want most heavily, it must be of the greatest advantage. We, however, for the present, leave it to abler hands than our own.—*Jamaica Watchman.*

Chinese Mulberry.

I have just read a paragraph in the Northampton Courier, describing the cocoonery of Mr. Whitmarsh, and the arrangements of that gentleman for prosecuting the culture of silk. The Courier says Mr. Whitmarsh does not at present feed his worms upon the Chinese mulberry. That plant is yet so rare, that growers are anxious to multiply them by laying down all the roots. "On some of the Chinese trees the berry is now found, and great care will be taken to preserve the seed, so that the *precise character of the plant propagated from them may be precisely known.*" I am glad to be able to inform the Editor of the Courier and Mr. Whitmarsh, that the "*precise character of the plant propagated*" from the seed of the Chinese tree is already *accurately known* in Connecteut. Some three or four years since, a scientific gentleman of New Haven obtained from Prince's nursery at Flushing, several shoots of the Chinese mulberry for the purpose of ascertaining whether it was a new species, or a variety of either of the kinds before known in this country. The shoots grew with extraordinary luxuriance and vigor. A lay-

er from one of them obtained a height of more than *eight* feet last summer, and bore leaves a foot or more in length,and nine inches in breadth. The second year after transplanting, a few seeds were obtained from one of the trees, and I saw one of the seedling plants between three and four feet in height, the growth of a single season, bearing in every respect a precise resemblance to the parent tree—the same rich and delicate leaf, and the same thrifty growth. The botanical knowledge of the gentleman is unsurpassed in this part of the country, and he expressed to me his conviction that the *Morus multicaulis* was a distinct species, and that it might be propagated to any extent from the seed.—*Middletown Advocate.*

From the New England Farmer.

Top Dressing Grass Lands.

Although as a general rule, manure applied as a top dressing is in some measure wasted by sun and air, and given to the winds and waters, still in many cases it will be expedient to apply it to the top of the soil instead of ploughing it under. Sometimes it is inconvenient to plough grass land, which may need manure. The soil may be wet and rocky, or otherwise unfit for the plough. In such cases mowing land should, once in two or three years, have a top dressing of some manure suitable to the soil. Plaster of Paris is a good top dressing on some grounds, and for some plants; and in some cases it has no perceptible effect. M. Candole, a French writer, observes that plaster acting or operating chiefly on the absorbent system of plants, its effects are not like those of manure buried in the soil, which act principally on the roots. The latter, according to their *particular nature*, divide, soften, enrich, warm or stiffen the soils with which they are mixed. The quantity of plaster spread on lands is so trifling that it can have little effect on the soil. I speak from experience. "Plaster buried in the earth where sainfoin has been sown, has produced no visible alteration; while the same quantity of plaster spread over the same surface of sainfoin has produced the most beautiful vegetation." The same writer agrees with other agriculturists in opinion, that plaster operates on plants in a direct ratio to the size and the number of their leaves.

There is a difference of opinion among agriculturists with regard to the season at which manure should be applied to mowing ground. Loudon says, "In the county of Middlesex, where almost all the grass lands are preserved for hay, the manure is invariably laid on in October,while the land is sufficiently dry to bear driving of loaded carts, and when the heat of the day is so moderated as not to exhale the volatile parts of the mass. Others prefer applying it immediately after haying time, from about the middle of July to the end of August, which is said to be the good old time, and if that season be inconvenient, at any time from the beginning of February to the end of April."

Lorain says, "If dung be used for top dressing, it should be applied soon after the first crop of grass has been mown; and before the manure has suffered any material loss by fermentation. The grasses should be suffered to grow till they form a close shade. After this they may be pastured; provided a good covering for them be preserved. This will prevent much exhalation; it will also keep the soil much more open to receive the juices of the manure. As water does not pass off so freely through a close pile of grass, much of the coarser particles of the washings from the manure will be arrested in their progress through it, and much more of the fluids from the dung will sink into the soil. The close covering also greatly favors the decomposition of the litter, and by keeping it flexible causes it to sink farther into the soil, and lie much closer to it. Therefore but little if any of it will be found in the way of mowing the ensuing crop of grass, or of making it into hay, provided the manure be evenly spread over the ground. But as the want of a second crop for hay, and other circumstances, may prevent the cultivator from hauling the dung at the proper time, he may haul and spread it any time before the frost sets in; but not with the same advantage. Still if care be taken in raking up the hay of the ensuing crop, but little of the litter will appear among it."

From the Maine Farmer.

Grain and Hoed Crops.

Mr. Holmes—In the article in your last paper on comparing "grain and hoed crops," you appear to make Indian corn the criterion by which to judge of the profits of hoed crops. If this is the fact, and corn is a fair criterion on which to judge of the profits of all hoed crops, then I will go with you, heart and hand, in throwing aside the hoe, and using only the harrow, the sickle, &c., for I consider Indian corn one of the most unprofitable and uncertain crops a farmer can put into the ground. But before I do this I should like to make a few figures by way of calculation, to see what crops do actually neat the most clear profit, not that I would have one crop cultivated at the entire exclusion of all or any other, but that we may be enabled to cultivate the most of that which will yield the most profit, all things considered, and considering the seasons as they have averaged for the last five years. Without spending time to show that hoed crops (except corn) can be raised on land of an inferior quality, and with less manure than wheat, &c., we suppose an acre of land prepared to receive wheat. For the last five years an average crop of turneps from that acre would be 500 bushels, worth 20 cents a bushel,.....$100,00

An average crop of potatoes would be 350 bushels, worth 1s. 6d. per bushel,...87,50

Crop of peas and oats, 35 bushels, at 4s...23,34

" Oats,.....40 " " 3s...20,00

" Rye,.....25 " " 3s...16,67

" Wheat,.....18 " " 6s...18,00

" Beans,.....10 " " 12s..20,00

" Indian corn,.....15 " " 6s...15,00

From this calculation, which I believe is not far from the facts, it appears that turneps and potatoes are far more profitable than grain crops, and grain is more profitable than Indian corn. With corn, *all* depends on the season; for the last five years, the chance has been three to two to lose the whole crop, while all other crops named have given a small yield, even the poorest season. I have known a number of fields of corn within that time to prove total failures; and the smallest yield of wheat that has come to my knowledge, five bushels to the acre; the smallest crop of oats, fifteen bushels; smallest piece of rye, (one piece of winter rye excepted,) nine bushels; smallest crop of potatoes, ninety-five bushels; of peas and oats, ten bushels. These were each on land of very inferior quality, and in such poor order, that no one would have thought of attempting to raise corn on it. I have not been particular in keeping an account of the best crops that have been raised, as they are so frequently trumpeted through the newspapers, that every body has an opportunity to know about them. I have frequently seen statements of how large a quantity of hops have been raised to the acre, but am not able to determine what is a medium crop, and how small a crop has been raised, and whether they do not sometimes prove a total failure. Will some of our readers answer these inquiries.

June 12. M. S.

The Fruit-Drier.

Mr. Medary—Having found a fruit-drier a convenience in family economy, I am induced to give a short description of it, and its uses, pro bono publico. Take two boards 18 inches wide and 4 feet long, set them on end by the side of the house—on the top nail a cover, extending a little over the front, and leaving an inch open at the back, to allow the air to pass freely—make 10 or 12 drawers 3 feet long, 3 inches deep. The sides of common stuff, the bottoms of half inch stuff, split into narrow slits, and with brads fastened five-eigths of an inch from each other, so as to let the air pass freely; on these slats lay the fruit; the drawers may be taken out on sunny days, and in case of rain, and at night, they may be replaced. In this way the fruit is never molded, and much labor is saved. The fruit requires no moving, and the drawers can be replaced with very little labor, and the drying goes on in rainy weather and at night.—*Ohio Farmer.*

From the Claremont N. H. Eagle.

Sheep.

It is a well known fact, that wool growers in this section of the country, whose flocks exceed 200 sheep, lose a large number of their sheep each winter. Some of them, we will allow, die of old age; but too many of them do not live more than two years. There is a remedy for this loss of property, and that too directy in the hands of the shepherd. This being the case, I am anxious to lay it before the public that all may profit by it hereafter.

It is a custom among many farmers, when they drive in their flocks in the fall, to put the whole flock together in a single barn, shed, or whatever place they may happen to have to keep them in. Now it is very evident that the young, the very old and weakly, or in other words, the most unhealthy of the flock, cannot possibly fare equally well with the rugged, and it is a fact, that while the one is thriving the other is losing its strength. When kept in this situation, one after another falls from hunger, and other causes incident to this state of affairs, and they are no longer able to raise themselves. Here the shepherd for the first time separates the almost lifeless sheep from the multitude, and endeavors to restore it to health. But it is too late. He is soon convinced that "a stitch in time saves nine" —that ten thousand dying sheep are worth no more than the wool on their backs.

When sheep are brought in from the pastures, in the fall, they should be divided into four distinct flocks, viz:

1st. Meager or sickly, which should be kept in a warm barn, with but few in a pen. They should have salt as often as once a week—should have a handful of corn each day through the winter—as much hay as they can eat through the day, and should be watered as often as twice a day. This will not fail to keep them in good order.

2d. The Ewes also should be kept from the rest of the flock, and should receive the same treatment, with the exception of the grain, which may be given occasionally, though it is not necessary.

3. The Bucks intended for the benefit of the flock, should be kept by themselves, that they may be in good order, and for another reason that will suggest itself to all wool growers.

4th. And last of all are the Wethers, which may be, if healthy, kept entirely on hay and water.

I have for twelve years kept a large flock of sheep, and have lost a great many; but since 1830 I have adopted this course, and have not lost one tenth as many as I did in the same number of years preceding that time.

An Old Farmer.

Old Method of Taking Honey

FROM THE HIVE.

A correspondent, who apprehends that many of our readers are unacquainted with the manner in which bees are usually deprived of their honey, sends us a description of the process, which he hopes will soon be superseded by the more humane and efficient method of Mr. Nutt, which we have described in No. 113, page 11, of the third volume.

When the time for taking the honey arrives, which is at the end of August or the beginning of September, on some evening after the bees have retired into the hive, a small hole is dug in the ground near to the stand or bench on which the hive rests. This hole is filled with pieces of cotton or linen previously dipped in melted butter; and when all is ready, these are set on fire, and the hive is gently lifted off the stand and placed upon the hole. The escape of the bees is prevented by the earth which is dug out of the hole being heaped around the bottom of the hive; and thus the poor insects perish amid the sweets for which they have toiled all the summer, and

by the hands of those who have afforded them a house in which to lay up their store. The cruelty and treachery of this measure could only be excused by that necessity for it which has now been superseded. That our readers may have an idea of the number of these industrious little beings deprived of life for the sake of a few pounds of honey, it may be stated that a single hive is supposed generally to contain 16,000 bees; but let us say 10,000—then, as each hive affords about 16 pounds of honey, 400,000 bees must be killed in order to obtain, from forty hives, 640 lbs. of honey. When the honey has been expressed from the honey-comb, the comb is boiled in water, which is afterwards strained through a fine sieve, and that which remains in the sieve is the substance called "bees' wax," so much used for polishing furniture, &c.

If the season proves unfavorable for the gathering of honey, the bees are not destroyed, as that would be an unprofitable sacrifice of insect life, but they are reserved for another season, and fed during the winter with brown coarse sugar, moistened with ale. A wet summer is very unfavorable to the collection of honey; and in a fine summer it often happens that the bees are deprived of their honey by wasps and wild bees. Our correspondent has known instances in which a hive of bees, in a very prosperous condition, have been deprived of all their honey, and a great number of the bees destroyed, by wasps. A wasp will conquer five or six bees at once by means of its large incissors, with which it cuts large pieces out of their wings, and thus prevents them from flying; and being unable to reach the hive, which is raised some distance above the ground, and from which the wasps always thrust them, they perish during the night.—*Penny Mag.*

The Lexington Intelligencer of the 7th inst. says—"We understand that H. Clay, Esq. sold to Spencer Cooper, Esq., a few days ago, one of the improved *Short Horned Cows*, with a calf one day old, by *Accommodation*, for $500, but she is said to be unsurpassed in promise. Before the cow and calf were removed from Ashland, Mr. Cooper sold the calf, delivered at weaning, to Major S. Smith for $200."

From the Mercantile Advertiser.

NEW YORK MARKET.—August 1.

ASHES—Pots are coming slowly to market, the sales this week do not exceed 400 brls at $4, 00. Pearls have become plenty and the price has declined, being now nominally $7; since our last review some lots of this description have been received direct from Montreal. The demand continues small.

FLOUR—Western continues dull, sales are made at $6,75 to 6,87 for common brands, and $6 87 to 7 for fancy, which is a decline of 12 1-2 to 25 cents on our previous quotations. But little is doing in Southern. Georgetown is held at $7 to 7,25, and no sales; 200 brls Richmond City Mills, Gallego brand, sold for export at $7,25.

GRAIN—Another cargo of new North Carolina Wheat has arrived, which has not yet obtained a purchaser. A cargo of 1700 bushels Southern flat Corn, obtained 102 cents and several hundred bushels Southern round 107 cents; sales of Northern at 108 cts. Rye brings 94 cts. which is a decline.

HEMP—The market was cleared last week of Russia clean, yesterday however a vessel arrived from Cronstadt, but has only a small importation of the article on board.

PROVISIONS—There has been much more activity than is common at this season of the year. Pork brisk—Mess 17 to 17 3-4—Prime 13 1-2 to 14. Beef, Mess 13 to 13 1-4—Prime 9 1-2 to 9 3-4. City rendered Lard at 10 1-2 cents.

WOOL—There has been a fair business transacted this week, particularly in the coarse kinds of wool. The sale at Boston on the 29th ult. we learn was well attended, and prices fully sustained. Saxony Sheeps Wool, assorted qualities, bro't 82 1-2 to 122 1-2 cts; Odessa Fleece, 65 to 70 cts; Tuscany Wool, 45 to 61 cts; Saxony Lambs, inferior, 65 to 85 cts; but little of the coarse descriptions was offered. A lot of 40,000 lbs American fleeces 3-4 blood, is reported as having met a ready sale at 65 cts.

Meteorological Table,

KEPT AT ROCHESTER, FOR JULY, 1835.

	10 A. M.				10 P. M.			
Days	therm.	barometer.	winds	sky	therm.	barometer	winds.	sky
1	64	29,55	w	fair	59	29,50	w	fair
2	72	29,40	w	do	64	29,35	w	do
3	72	29,35	w	do	70	29,30	w	do*f*
4	75	29,35	w	do*a*	70	29,40	s w	cloudy
5	74	29,40	w	do	62	29,45	w	fair
6	75	29,50	s w	do	65	29,45	w	do
7	82	29,40	w	do*b*	54	29,50	N	cloudy*g*
8	70	29,55	N E	cloudy	66	29,55	N E	do
9	54	29,55	s	do	66	29,55	N E	do
10	60	29,55	s	do	60	29,55	N W	do
11	74	29,50	s w	fair	70	29,50	w	fair
12	70	29,45	w	do	65	29,45	N W	do
13	68	29,35	w	cloudy	66	29,40	w	do
14	72	29,35	N W	faire	65	29,40	N W	dog
15	66	29,45	w	cloudy*d*	60	29,45	w	cloudy*g*
16	74	29,50	N E	fair	65	29,50	N W	fair
17	72	29,60	w	do	66	29,60	w	do
18	78	29,60	w	do	70	29,55	s	do
19	83	29,50	s w	do	68	29,50	w	do
20	82	29,50	s w	do	64	29,55	N E	do*h*
21	70	29,65	w	do	62	29,70	w	do
22	76	29,75	w	do	66	29,70	E	do
23	76	29,65	w	do	76	29,60	w	do
24	82	29,60	s w	do	78	29,50	s	do
25	80	29,45	s w	cloudy*e*	68	29,50	w	do
26	70	29,65	E	do	64	29,65	N W	do
27	80	29,60	s	fair	70	29,65	s w	do
28	72	29,55	s w	cloudy*e*	70	29,50	s w	do
29	78	29,45	w	fair	70	29,45	w	do
30	80	29,45	w	do	78	29,30	w	cloudy*i*
31	80	29,25	w	cloudy	68	29,30	w	do*j*

MEANS.—Ther. 72°—Barom. 29.48—Rain 1.8 inch.

a Showers—*b* high winds—*c* showers—*d* rainy, spring water 56°—*e* showers—*f* high winds—*g* showers—*h* thunder showers—*i* high winds, thunder and much lightning—*j* showers.

The Complete Farmer & Rural

ECONOMIST,

BY Thomas G. Fessenden, Editor of the New England Farmer, second edition, revised, improved, and enlarged, just published and for sale at the Rochester Seed Store.

This work is got up in superior style, published on fine paper with new stereotyped impression, and is decidedly the neatest thing of the kind yet published in this country. Booksellers and others supplied by the dozen at the trade price.

aug 8 REYNOLDS & BATEHAM.

Important to Owners of Saw

MILLS.

THE subscriber having engaged in the manufacture of "Rich's Patent Saw Mill Dogs," after using them in his Saw Mill in Lockport, and becoming well satisfied that they will add at least twenty per cent. to the nett profits of any Saw Mill, by using them instead of the Mill Dog now in common use, has no hesitation in offering them as one of the greatest improvements, as a labor-saving machine, lately introduced. The following is the advertisement of patentee, and upon experiment it will be found, that he does not recommend the Dogs as high as they will bear.

Rich's Patent Saw Mill Dogs.

Important to Owners of Saw Mills and Dealers in Lumber.

THE subscribers now offer for sale the above articles, which possess the following advantages over the Mill Dog now in general use, viz:

1st. The lumber by the use of these dogs, is sawed without any stub shot.

2d. These dogs are self-setting, no attention is required as to the removal of the log to fix the thickness of the board or plank to be cut, this being done by the machinery of the dogs, with an accuracy and expedition that cannot be gained by the usual method of setting by the eye or gauge.

3d. It is generally allowed by Sawyers who have seen these dogs in operation, that the labor of one person is all that is required in a saw mill.

4. By a fair calculation it is considered that about every tenth board is gained in time, that is to say, one tenth more lumber can be sawed in a given time by the use of these dogs, than can be sawed by the use of the old fashioned article, or common mill dog.

5th. These dogs enable the sawyer to make an article so much more true and even than that generally brought to market, sawed by the use of the old fashioned dog, that it already commands a price above the lumber sawed by the latter method, as will be seen by reference to the advertisements of several dealers in lumber.

We wish as much as possible to avoid the ridiculous practice of puffing a patent article, and at the same time give the patent in question a fair recommendation, and such a statement of its worth and utility as it fairly merits, and we can feel safe in guaranteeing the fulfilment of. We therefore respectfully solicit the attention of all who are concerned in the making of lumber, to the statements contained in this article, and particularly those made by disinterested persons.

"We, the undersigned, Lumber Merchants in the village of Ithaca, having examined the lumber sawed in the mills in which the above patent Dogs are used, do hereby offer to all those who have that quality of lumber to sell in our market, 50 cents per thousand feet on 1st and 2d quality, and 25 cents per thousand on 3d and 4th quality, over and above the market price for said qualities of lumber sawed by the usual method or old fashioned dogs.

Willliams & Brothers,	Benj. K. Delavan,
E. R. Ives & Co.	N. Philips & Co.
Ebenezer Vickery,	James O. Towner,
B. A. Potter,	Harley Lord."

Ithaca, March 6, 1835.

The Patentee says that "*one tenth more lumber can be sawed in a given time by the use of these Dogs, than can be sawed by the use of the old fashioned article.*" Now this is not saying enough, for by *experiment* I am satisfied that *one fifth* more can be sawed in a given time, than by the old dog; and after the log is slabbed and thrown down ready for cutting into boards, *one third* more was sawed, in the same time, in my mill, than with the old dog. *It was tested fairly.* The Saw Mill is a double one; on one carriage was the old dog, and on the other the patent dog, both saws have the same speed, yet the advantage of self-setting, and not having to undog the log, caused an actual gain of *more than one third;* and besides, the lumber was sawed with much greater precision.

Mill owners in the counties of Livingston, Monroe, Genesee, Orleans, Erie or Niagara, can be supplied by applying to the subscriber at Lockport.

☞ If any purchaser is not suited with the Dogs after experiment, no payment will be required.

L. A. SPALDING, *Lockport, Niagara co.*

Lockport, 6th month 25, 1835.

☞ Apply to ROBERT SEDGWICK, Rochester, and to the Saw Mill of for a specimen of the Dogs. aug 8-r3mf4t

Cattle.

I WILL sell, if applied for soon, or previous to 1st October next, from 20 to 30 good native cows, in calf to a prime *pure blooded, improved,* Short Horn Durham bull. Stock of the bull has been fully tested as being of the first quality, as I have now about 20 of his calves from the above mentioned cows. The calves of course will be half blooded, and from the specimens now in my possession, are worth three or four times the value of common cattle. The cows are in fine condition, and are good animals of the kind.

I will also sell 6 or 8 very fine half blood Durham Bull Calves, from 4 to 5 months old, and now about the size of common yearlings, having had no extraordinary keeping.

The prices of these animals, either the cows or calves, will be from 20 to 30 dollars, according to quality and condition.

Apply to me at Buffalo, or to J. H. Lathrop at White Haven, on Grand Island, where the cattle may be seen. L. F. ALLEN.

A Valuable Farm for Sale.

ON the Ridge Road, south side, two miles from the canal, in the town of Murray, Orleans county, upwards of 200 acres, 130 highly cultivated, about 100 acres wheat now in the ground, besides oats, corn, potatoes, &c.—buildings large and convenient. This is desirable property, being situated on the best road in this state,—the soil varied, and every variety of the richest kind. The situation too is delightful. Price moderate—terms easy. Inquire on the premises of W. B. ILES.

Prof. Silliman on Geology.

FIRST REGULAR LECTURE.

Mr. Silliman gave his first regular course at the Lyceum Hall, on Friday evening, May 1st. His subject was the *Chemical Constitution* of the earth. He defined Geology to be the natural history of the earth; and he said its more exact object was to inform us of the crust of the earth. The crust is comparatively very thin. We are acquainted with it to the depth of ten miles.—There are very powerful forces in operation in the interior, though absolute certainty respecting them cannot be obtained. Knowledge of the interior to the depth of ten miles is had, by means of mines, some of which are half a mile deep—of wells, borings, canals, sides of mountains, sea coasts, and especially, the inclination of the strata of rocks. These strata, where they are thrown up as inclined planes, reveal the interior to a considerable depth.

The Professor stated that Geology had to do, not with imagination, but with sober matters of fact. It ascertains facts, and then, with the aid of cool reason, applies to them scientific principles. The uses of this study, he said, were manifold. It improves the understanding—it affords the most rational kind of amusement—it is confirmatory of the Scriptural history of the earth. Chronology commences with the race of man—Geology commences with the formation of the globe. This science tends to illustrate the character of the Creator—it discovers materials for architecture, and shows how the earth may be most successfully cultivated. Man in mountainous countries must be hardy and industrious; in alluvial countries, he is inclined to indolence, luxury, and vice. The external appearances of the globe are owing to its internal structure.—Water running through regions in which there is nothing soluble, is pure and good; when flowing through places where there is lime or other soluble matters it is impure. Wealth depends on the physical constitution of the earth.

Geology is divided into positive and speculative. Positive Geology has to do with facts—speculative with reasonings upon those facts.—The great agents that have produced such changes in and upon the earth, are still in existence. They are not dead, nor asleep, though they may appear less active at one time than at another. Some of these agents are attraction, repulsion, fire, and water, with the various mechanical and chemical forces.

In regard to the chemical constitution of the earth, Mr. Silliman said, that the whole might be considered as an equation, combustibles being on one side, and supporters of combustion on the other This gave it, he stated, an admirable simplicity. On one side of the equation, are, as the supporters of cumbustion, oxygen, iodine, bromine, and chlorine; on the other, every thing that will burn, all the metals, and a variety of other substances. All the supporters of combustion are kept in confinement by being in combination with other substances, else the globe would soon be consumed. Occasionally, however, they are unchained, and direful are the the results.—Combustion is continually going on. Even the lungs of man are nothing but a labratory, where combustion is constant. The results of combustion are oxides or acids. The Professor illustrated his statements with many beautiful and splendid experiments.—*Salem Landmark.*

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SECOND LECTURE.

Internal fire or Volcanoes. The lecturer said it was a tremenduous thought, that the centre of the earth was a vast mass of liquid boiling flame. But that it was so, was in the highest degree probable. He then glanced at the volcanic regions on the globe, beginning with Iceland, which is wholly volcanic, being the hottest and the coldest country in the world. He said it was well ascertained that Sweden was rising out of the water, at the rate of about four feet in a century; that is, the ocean is gradually receding from the shores of that country, as the water marks plainly indicate. This he supposed to be the expansion of that part of the crust of the earth, produced by the internal heat.

In England there are no volcanoes, and no evidence that there ever was any. But in the city of Bath there are heated waters which are known to have existed in their present state for more than two thousand years. These waters can be heated only by internal fires.

In France there is a series of extinct volcanoes along the borders of the Rhine. They are also to be found in Spain and in Portugal, in Italy and in the islands of the Mediterranean.—A volcanic Island emerged from this sea about four years ago. There is, therefore, reason to believe it reposes on a bed of fire. There is abundant evidence that volcanoes have been in Palestine; the last probably were those connected with the destruction of Sodom and Gomorrah. They are clearly traced around the Caspian Sea, and in the centre of Asia.

In the Azores, the existence of forty volcanoes is discoverable. So likewise they are found in the Madeira, the Canary, and the De Verde Islands, in Madagascar, Bourbon, along the Red Sea, in Summatra, Java, Kamschatka, and on the northwest coast of America. Mexico is a peculiar volcanic region, and so is the whole western side of South America. They have not existed on the eastern side. Sufficient relief has thus far been had on the western coast, but should these safety-valves be obstructed for any length of time, very probably there would be volcanoes on the eastern coast.

The Pacific ocean to a very great extent stands upon a basis of fire. There are on the globe three hundred chimneys, through which the fire can escape from its prison in the centre of the earth. Volcanoes are very justly denominated safety-valves, the conservative principles of our globe.

The invariable percusor of a volcano is an earthquake, generally attended with loud detonations. Chasms are opened in the earth, and sometimes cities are swallowed up. Changes in the atmosphere are also visible. The seasons are irregular; animals utter cries of alarm; dizziness of the head is experienced by men.

The waters of the Ohio were affected by the earthquake at Lisbon. In the eruption of a volcano, rocks are dashed against each other, and either ground into powder, or broken into fragments. White smoke first emerges from the crater, then black, rising like the trunk of a tree.

The most remarkable volcano on the globe is in the island of Hawaii, one of the Sandwich group. This has been visited and scientifically examined and described by the American Missionaries, to whom Mr. Silliman awarded high praise, not only for their Christian zeal but for their attainments in science and literature. Science as well as Christianity is under obligation to them for their devotedness and enterprise.

The cause of volcanoes is internal fire. That it exists, there is very satisfactory evidence.—There is a gradual increase of heat as we descend into the interior of the earth. At two miles below the surface, water will boil; at ten miles below, rocks become red hot. The frozen crust of the globe is supposed to be about forty miles thick. We cannot be perfectly secure against the effects of this fire. The crust of the earth is at any time liable to be broken. Our security and dependence are upon Him who made the world, who gave to matter all its laws, and who controls its wonderful movements.

The sun is a body of fire, occasionally exhibiting dark spots on its surface. Mr. Silliman suggested those spots might be produced by the formation of a freezing crust like this which covers our globe. If so, the time may come when the sun shall all be frozen over, and there shall be no more light or heat to cheer or warm this solar system. For the consolation of this audience, he said they would not be here when such an event should happen!—*Ib.*

STUDY.—No one ever became eminent in any thing without patient study. It is the only key that will unlock the treasure house of knowledge. Genius and talents are of little use without it, and can never compass any great object unless by laborious research and profound investigation. We are apt to forget, while considering with feelings of astonishment the enlarged scientific and philosophical acquirements of some men, that this amount of information was gained slowly and in regularly rising gradations; and in most instances, during the time when other men were either idling away their leisure moments or slumbering on their pillows; yet this is the true history of their great knowledge.

There are but few men who have not leisure for acquiring extensive information. Much time is wasted in listlessness and inactivity after the usual business of the day has closed, until the mind becomes wearied and dissatisfied with its own idleness, which might be devoted to the study of various branches of literature and science, and to the treasuring up of that which would be food to the craving intellect. There are but few who could not devote one, two, or three hours to study, every day, by which means, in a few years, an invaluable amount of information might be gathered together. But even if close study were not entered into in these moments of freedom from business, there is much to be gained by reading the less abstruse productions of literary men—these will enlarge the capacity, and give the habit of thinking, besides leading on to the contemplation of various themes, until a more extended desire is created in the mind, and it turns to the consideration of that which is more abstract and difficult.

To young men the habit of study is of vital importance; and with it should be cultivated the habit of thinking and investigation. No day should go by without some addition to the stock of information, and no subject be allowed to pass from under review, without its being fully comprehended.

One great injury which is sustained by young men in the pursuit of knowledge, arises frequently from an eagerness to grasp too much at once.

They fall in love with every science and every branch of literature, and anxious to gather up all at once, they are constantly, like the bee, sipping at this flower, and then glancing off to the next, without extracting from either a tithe of the hidden treasure which careful and abstracted study would open to their grasp. For the acquirement of any particular science, the mind must come perfectly free to its investigation.—One branch mastered, and the enquirer is beyond the threshold of the temple of learning with the key in his hand that unlocks every apartment. But if the first principles are played with, it is labor spent for little profit and less promise.—[Baltimore Young Men's Paper.

Mulberry Seed.

JUST received at the Rochester Seed Store, a quantity of new *White Italian Mulberry Seed*, gathered within the last three weeks.

As this is a good season of the year for sowing the seed, persons desirous of commencing the silk business, or increasing their present stock, will do well to obtain some of this seed, which we know is perfectly new. REYNOLDS & BATEHAM.

Rochester, July 25, 1835.

The Silk Culturist, & Farmer's MANUAL.

"THE object of this publication is to disseminate a thorough knowledge of the cultivation of the Mulberry Tree in all its varieties, the rearing of Silk Worms, the production of Cocoons, and the reeling of silk in the most approved method."

It will also contain interesting matter on Agricultural subjects generally.

Published monthly at Hartford, Conn., by the Hartford County Silk Society, at 50 cents per year, in advance. Subscriptions received at the Rochester Seed Store, by

july 25 REYNOLDS & BATEHAM.

Turnep Seed.

FOR sale at the Rochester Seed Store, Turnep Seed of almost every variety.

Every farmer will do well to put in a good patch of turneps, as the past season has shown the necessity of having a good supply of this kind of fodder, to carry his stock advantageously through a long cold winter. REYNOLDS & BATEHAM.

Rochester, July 25, 1835.